

THE LYMANTRIIDAE OF KWANG-TUNG (S.E. CHINA).

BY C. L. COLLENETTE.

(Plate X.)

THIS paper is based upon a very extensive collection made by Dr. Rudolf Mell in the province of Kwang-tung during the years 1908-1923, and submitted to me for determination by the kindness of Dr. Martin Hering, of the Zoological Museum, Berlin.

The total number of species listed is 81, some of which have not been recorded previously from China, while 10 are described as new. Over half of the previously known species appear to be identical with forms from Northern India, 8 were described originally from Formosan specimens, 7 from Japanese and 3 from Javanese.

The collection, including the types, has been returned to the Zoological Museum, Berlin, while paratypes and duplicate specimens have been presented wherever available to the Tring and British Museums.

Localities listed will be found on the map accompanying Dr. Mell's *Beitrag zur Fauna Sinica*, in *Arch. für Naturg.* 1922, Abt. A, Heft 10. Canton, Ding-wushan, Lofaoshan and Lokong are in the tropical southern part of the province, the other localities in the subtropical northern portion. Kiukiang is still farther to the north.

Opportunity has been taken to include on the accompanying plate 7 new species from Chekiang and Kiangsu, described by me from specimens in the Höne collection (Zoological Museum, Berlin), and published in *Stylops*, iii, pp. 113-17, 1934.

Ridgway's *Color Standards and Color Nomenclature*, 1912, has been used for descriptions of colour in new species.

***Stilpnotia leucosccla* sp. nov. (pl. X, fig. 14).**

♂. Palpus whitish, on the outer side ochraceous buff. Antennal shaft, body and legs white, pectinations of antenna pinkish buff. Wings and fringes white; a "watered silk" effect over the whole of the upperside of forewing, the bands close together and roughly at right angles to the inner margin, as in *S. moorei* Leech; a small sepia spot on the centre of the discocellulars.

♀. Resembles the ♂.

Expanse: ♂♂ 27-31 mm., ♀ 37 mm.

1 ♂ (holotype), 1 ♀ (allotype) and 1 ♂ (paratype), mountain forests south of Linping, July and October; 1 ♂ (paratype), Lungtaoshan, May; 1 ♂ (paratype), Mantsishan, July. Also represented in the Höne collection by a series of 4 ♂♂ and 6 ♀♀ from Chekiang.

Can be separated easily from the larger *Stilpnotia moorei* Leech by the white legs and white antennal shaft. In Leech's species the shaft and the tarsi of all legs are dark brown.

Arctornis alba Brem.

Aroa alba Brem., *Bull. Acad. Imp. des Sc. de St. Pet.* iii, p. 478 (1861).

1 ♂, Lungtaoshan, 25.vii; 1 ♂, Fungwan, 11.xi.

Leucoma seminsula Strand (pl. X, fig. 6).

Leucoma seminsula Strand, Seitz' *Grossschm. d. Erde*, x, p. 309 (1914).

1 ♂, Canton.

This species appears to be rare, and the present insect is, I believe, the second specimen known. It is larger than the type, with an expanse of 38 mm., but otherwise answers reasonably well to Strand's description. I have included a figure.

Leucoma submarginata Wlkr.

Redoa submarginata Wlkr., *List Lep. Ins. B.M.* iv, p. 826 (1855).

3 ♂♂, Canton; 2 ♂♂, Lofaoshan, 20.v and 9.x; 3 ♂♂, mountain forests south of Linping, 17.vii (2) and 10.ix; 1 ♂, 1 ♀, Lungtaoshan, 7.xi and 18.ix; 1 ♂, 3 ♀♀, Mantsishan, 15.iv, 9.viii, 12 and 14.x; 1 ♂, Samkong, 17.x.

These insects show variation in size, shape and degree of lustre, but appear to belong to a single species. Bred series from different parts of its reported range are required for further study.

Leucoma subvitrea Wlkr.

Leucoma subvitrea Wlkr., *List Lep. Ins. B.M.* xxxii, p. 344 (1865).

1 ♂, Lofaoshan, 20.iv; 1 ♂, mountain forests south of Linping, 7.ix.

Leucoma comma Hutton.

Ocinara comma Hutton, *Trans. Ent. Soc. Lond.* (3), ii, p. 330 (1865).

1 ♂, Lungtaoshan, 21.ix.

Leucoma diaphora sp. nov. (pl. X, fig. 21).

♂. Palpus capucine yellow. Antennal shaft, thorax and abdomen pale ochraceous buff irrorated with Prout's brown. pectinations of antenna snuff brown, patagium pale pinkish buff. Head amber brown, between the eyes pale pinkish buff. Pectus, venter and legs pale pinkish buff, mixed on tibiae and tarsi with capucine yellow, and with a spot of Prout's brown at the centre of the fore tibia and at the base of the fore tarsus. Forewing pale ochraceous buff, irrorated evenly over the whole wing with Prout's brown; discocellulars bordered heavily with Prout's brown; a series of terminal interneural spots of Prout's brown from vein R^1 to vein M^3 ; fringe sayal brown. Hindwing pale ochraceous buff, irrorated, except in the costal and inner marginal areas, with Prout's brown; discocellulars ringed with Prout's brown; fringe sayal brown. Underside of both wings pale pinkish buff; costal area of forewing irrorated with snuff brown; fringes of both wings snuff brown.

Expanse: ♂♂ 37-38 mm.

1 ♂ (holotype) and 3 ♂♂ (paratypes), mountain forests south of Linping, August and September; 1 ♂, Canton. Also represented in the Höne collection by one ♂ from Chekiang.

A very distinct species, nearest to *Leucoma micucea* Wlkr. (1862).

Caviria impressa Snell.

Leucoma impressa Snell., *Tijdschr. v. Ent.* xx, p. 8 (1877).

3 ♂♂, 1 ♀, Lofaoshan, 14, 19 and 21. x, and (♀) 26. vii.

I have not seen Snellen's type, but the present series answers well to his description and figure. The antennae are ochreous yellow with a white shaft.

Caviria parallela sp. nov. (pl. X, fig. 7).

♂. Palpus, head, thorax and abdomen whitish. Antenna Saccardo's umber (in some specimens the shaft towards the base whitish). Foreleg orange, banded narrowly on the tarsus with whitish; middle and hindlegs whitish, the mid-tarsus orange, banded narrowly with whitish. Wings and fringes white, shining; three "watered silk" bands crossing the upperside of forewing, parallel with each other and with the termen.

♀. Resembles the ♂.

Expanse: ♂♂ 37-41 mm., ♀ 44 mm.

1 ♂ (holotype) and 2 ♂♂ (paratypes), Canton; 1 ♂ (paratype), mountain forests south of Linping, May; 1 ♀ (allotype), Lungtaoshan, July.

Resembles *Caviria impressa* Snell., but with dark antennae in both sexes. The "watered silk" bands in the forewing are parallel with the termen, not oblique inwardly as in *C. clara* Wlkr.

Caviria ochripes Moore (?).

Stilpnotia ochripes Moore, *Lep. Coll. Atk.* p. 45 (1879).

5 ♂♂, 2 ♀♀, Lofaoshan, August.

I have seen no authenticated specimen of this species. The present insects appear to correspond to Moore's description, although not to the illustration in Seitz's *Grossschm. d. Erde*, x, pl. 39d.

Caviria crocoptera sp. nov. (pl. X, fig. 25).

♂. Palpus, thorax and abdomen whitish, forelegs missing in type. Antennal shaft white, pectinations tawny olive. Head xanthine orange, between the eyes whitish. Wings hyaline. In the forewing a patch of white scales on the centre of the discocellulars and a further patch at the lower angle of the cell; fringe white.

Expanse: 38 mm.

1 ♂ (holotype), Mantsishan, at light, 12. viii. 1915.

Resembles *C. dinawa* B.-Bak. in structure and general appearance.

Caviria melanoscela sp. nov. (pl. X, fig. 17).

♂. Palpus white, on the outer side fuscous black. Antennal shaft white, pectinations tawny olive. Head, thorax and abdomen white. Foreleg white, mixed on tibia, tarsus and inner side of femur with fuscous black; hindleg white, mixed on tarsus with fuscous black, and with a spot of fuscous black distally on the tibia. Wings and fringes, above and beneath, white, the surface dull and non-shining; apex and termen of forewing rather rounded.

♀. Resembles the ♂.

1 ♂ (holotype) and 1 ♀ (allotype), Shuiyuenshan, June; 1 ♂ and 1 ♀ (paratypes), Lungtaoshan, September and July.

Characters to be noted in this species are the white shaft of the antenna, black on palpus and legs, rounded apex and dull non-shining surface of forewing. It is abundantly distinct from *Stilpnotia salicis candida* Stdgr., with which it seems to have been confused in the past.

Perina nuda Fabr.

Bombyx nuda Fabr., *Mant.* ii, p. 119 (1787).

2 ♂♂, 4 ♀♀, Canton, 8.ii (2), February, March and September; 1 ♀, Dingwushan, June; 4 ♀♀, Lofaoshan, May, June, October and December.

Topomesoides jonasii Butl.

Aroa jonasii Butl., *A.M.N.H.* (4), xx, p. 402 (1877).

1 ♂, Canton, 19.viii; 1 ♂, Lungtaoshan, 7.ix; 1 ♂, Tsahyuenshan, 29.vi.

Porthesia torasan Holl.

Artaxa torasan Holl., *Trans. Am. Ent. Soc.* xvi, p. 73 (1889).

1 ♂, Canton; 2 ♀♀, Mantsishan, 7 and 10.viii.

These insects do not appear to differ from Japanese specimens.

I have not seen the type of *P. tsingtaunica* Strand (1910), but have little doubt that it is a well-marked specimen of this species.

Porthesia hoenei Collnt. (pl. X, fig. 13).

Porthesia hoenei Collnt., *Stylops*, iii, p. 114 (1934).

1 ♂, Kiukiang, September 1919.

Porthesia scintillans Wlkr.

Somena scintillans Wlkr., *List Lep. Ins. B.M.* vii, p. 1734 (1856).

1 ♂, 1 ♀, Canton; 2 ♂♂, Lofaoshan, 27.vii and 9.x; 1 ♀, Lungtaoshan, 7.vi; 2 ♀♀, Shuiyuenshan, 14.iv and 14.v.

Porthesia subnotata Wlkr.

Orvasca subnotata Wlkr., *List Lep. Ins. B.M.* xxxii, p. 502 (1865).

1 ♂, 1 ♀, Canton, the ♂ taken on 5.x; 1 ♂, Lofaoshan, 11.x.

Porthesia virguncula Wlkr.

Euproctis virguncula Wlkr., *List Lep. Ins. B.M.* iv, p. 836 (1855).

2 ♂♂, 1 ♀, Canton, 17.iv, 21.xi (2); 1 ♂, 2 ♀♀, Lofaoshan, 17.v, 26 and 27.vii; 1 ♂, Shuiyuenshan, 18.viii.

Euproctis intensa Butl.

Artaxa intensa Butl., *A.M.N.H.* (4), xx, p. 402 (1877).

1 ♀, Lofaoshan, 7.viii.

Euproctis flava Brem.

Aroa flava Brem., *Bull. Acad. Imp. des Sc. de St. Pet.* iii, p. 479 (1861).

3 ♂♂, 1 ♀, Canton; 5 ♂♂, 3 ♀♀, Lofaoshan, 10.iv, 18.vii, 10, 12 and 13.x, 6.v, 27.vi, 16.vii; 1 ♂, Mantsishan, 1.x; 2 ♂♂, Gaufung, 3 and 22.vi.

I have not seen Bremer's type, but the above insects correspond with the

description and with the series under that name in the British Museum collection. The spots in the apical area vary considerably in size and number.

Euproctis pseudoconsersa Strand (pl. X, figs. 2 and 3).

Euproctis pseudoconsersa Strand, Seitz' *Grossschm. d. Erde*, x, p. 345 (1923), nom. nov. for *E. consersa* Butl., *Cistula Ent.*, iii, p. 117 (1885).

34 ♂♂, 41 ♀♀ Samkong and Tongchungshan, 30.x-9.xi; 1 ♂, 1 ♀, Lungtaoshan, 2.vii and 28.vi; 1 ♀, Canton.

The series of ♂♂ exhibits a perfect gradation in ground colour from bistre (ab. *choka* Strand, 1910) to light orange yellow. The ♀♀ are rather uniform, save for three or four specimens having, in addition to the usual single subterminal spots below veins R^4 and M^1 , further single spots, small but distinct, below veins R^3 , R^5 , M^2 and Cu^2 . A few other specimens have the two spots almost obsolete. A normal example, and another with the additional spots, are illustrated on plate x.

Euproctis staudingeri Leech.

Chocrotriche staudingeri Leech, *Proc. Zool. Soc. Lond.*, p. 624 (1888).

1 ♂, Lokong, 8.vi; 1 ♀, Fungwan, 18.v.

Euproctis cryptosticta sp. nov. (pl. X, fig. 20).

♂. Palpus maize yellow. Antenna light buff. Head and thorax antimony yellow; abdomen tawny olive, the anal tuft clay colour. Pectus, venter and legs light buff. Forewing maize yellow; an antemedial fascia, bowed (concavity basad), lighter than the ground colour; a postmedial fascia, lighter than the ground colour, bowed (concavity basad) from costa to below vein Cu^2 , thence roughly at right angles to inner margin; some fuscous irroration over two-thirds of the wing from the subbasal area to beyond the postmedial fascia, not reaching the costa and not invading the fasciae; a round antimony-yellow spot on the discocellulars; two rather large round fuscous-black subterminal spots, between veins R^4 and R^5 , and M^1 and M^2 ; fringe maize yellow. Hindwing and fringe light buff. *Underside* of forewing light buff, lightly shaded in and above the cell with snuff brown; fringe maize yellow. *Underside* of hindwing, and fringe, light buff.

♀. Resembles the ♂.

Expanse: ♂ 25 mm., ♀♀ 34-38 mm.

1 ♂ (holotype) and 1 ♀ (allotype), Samkong, x.1912; 1 ♀ (paratype), Lofaoshan, iv. 1912.

To be noted in this species are the antimony-yellow spot on the discocellulars and the two subterminal black spots in the apical area of the forewing.

Related to *Euproctis recurvata* Leech (1899).

Euproctis plana Wlkr.

Euproctis plana Wlkr., *List Lep. Ins. B.M.*, vii, p. 1731 (1856).

1 ♂, 1 ♀, 21-23.iii, 2 ♀♀, 11-12.v, 2 ♂♂, 2 ♀♀, 27.x-2.xi, all taken at Canton; 2 ♂♂, 2 ♀♀, Lofaoshan, 30.iv, 15.x, 30.iii and 20.viii; 1 ♂, Lungtaoshan, 5.vii.

Euproctis bipunctapex Hmspn.

Somena bipunctapex Hmspn., *Ill. Hct. Br. Mus.* viii, p. 57 (1891).

6 ♂♂ and 2 ♀♀, Canton, of which one ♂ and one ♀ were taken on 6.iv and 29.vi, 1 ♂ and 1 ♀, Teeberg, June and August.

Euproctis pauperata Leech.

Euproctis pauperata Leech, *Trans. Ent. Soc. Lond.* p. 138 (1899).

Euproctis parviplagiosa Gaede, *Seitz' Grossschm. d. Erde*, ii, Suppl. p. 104 (1932).

1 ♀, 12.vii, and 2 ♂♂, 1 ♀, 4.xi (2) and 3.x, all taken in mountain forests south of Linping; 1 ♀, Tsahyuenshan, 18.viii; 6 ♂♂, 6 ♀♀, Tongchungshan, 14-28.viii, and 1 ♀ on 1.xi.

Food plant *Bambusa* sp.

E. parviplagiosa Gaede was described from a series collected at Tien-tsuen, which is only 30-40 miles from Moupin, the type locality of *E. pauperata*. I have examined the types, and *E. parviplagiosa* must sink.

Euproctis seitzi Strand.

Euproctis seitzi Strand, *Seitz' Grossschm. d. Erde*, ii, p. 139, pl. 21g (1910).

1 ♂, 2 ♀♀, Canton, 30.xii, 15 and 22.iv; 1 ♀, Lofaoshan, 9.iv; 1 ♀, Lungtaoshan, 23.ix.

I have named these insects from Strand's original description, in which he speaks of the forewing as "light ochreous," and the abdomen above as "black or greyish black." The figure on plate 21g does not agree entirely with the description.

Euproctis flavinata Wlkr.

Artaxa flavinata Wlkr., *List Lep. Ins. B.M.* xxxii, p. 331 (1865).

2 ♂♂, Canton, 10 and 23.iv; 4 ♀♀, Canton, 17.iv, 20-26.vi; 1 ♀, Lofaoshan, 20.iv; 2 ♂♂, Fungwan, 13 and 14.v; 1 ♂, Gaufung, 5.vi; 1 ♀, Samkong, 20.x.

Euproctis subfasciata Wlkr.

Artaxa subfasciata Wlkr., *List Lep. Ins. B.M.* xxxii, p. 332 (1865).

3 ♂♂, 1 ♀, Lofaoshan, 18.iii, 17 and 18 (2) iv; 1 ♂, Lungtaoshan, 22.ix.

Euproctis bipartita Moore.

Chaertricha bipartita Moore, *Lep. Coll. Atk.* p. 49 (1879).

1 ♀, Lungtaoshan, 28.viii; 1 ♀, Samkong, 24.v.

Euproctis quadrangularis Moore.

Chaertricha quadrangularis Moore, *Lep. Coll. Atk.* p. 50, pl. ii, fig. 23 (1879).

1 ♀, Dingwushan, 27.iii; 1 ♀, Lofaoshan, 11.iv; 1 ♀, Lokong, 80 km. east of Canton, 12.iii.

This species was sunk by Hampson (*Fauna Br. Ind.*, i, p. 480) as a form of *E. marginata* Moore, and apparently as a result of a misidentification. The true *E. quadrangularis* is a very different insect to *E. marginata*, and is well portrayed in the original illustration.

Euproctis guttata Wlkr.

Artaxa guttata Wlkr., *List Lep. Ins. B.M.* iv, p. 795 (1855).

3 ♀♀, Canton, 12.vi (2) and 3.x; 1 ♂, 2 ♀♀, Lofaoshan, 23, 28 and 30.iv.

Euproctis uniformis Moore.

Chaerotricha uniformis Moore, *Lep. Coll. Atk.* p. 49 (1879).

1 ♂, Canton; 1 ♂, mountain forests south of Linping, 24.vi; 1 ♂, Lungtaoshan, 10.x; 1 ♂, Mantsishan, 9.viii.

Euproctis plagiata Wlkr.

Cispia plagiata Wlkr., *List Lep. Ins. B.M.* iv, p. 858 (1855).

1 ♀, Canton West.

In this insect, the light patch at the lower angle of the cell in the forewing is larger than in any Indian specimen that I have seen, and there is slight dark shading over a considerable area of the hindwing.

Euproctis magna Swinh.

Somena magna Swinh., *Trans. Ent. Soc. Lond.* p. 479 (1891).

1 ♂, Lofaoshan, 10.x.1915.

Euproctis kanshireia Wilem.

Euproctis kanshireia Wilem., *Entom.* 43, p. 286 (1910).

1 ♂, Canton; 1 ♀, Teeberg, Linping, August; expanse ♂ 29 mm., ♀ 37 mm.

Females of this species vary considerably in the amount of dark shading on the upperside of the hindwing.

Two males and three females taken at Tongehungshan in August and September are very considerably smaller (♂♂ 22–23 mm., ♀♀ 30–32 mm.), but cannot be separated on any other character. They perhaps represent a local race, but may be merely starved specimens.

Euproctis varia Wlkr.

Euproctis varia Wlkr., *List Lep. Ins. B.M.* iv, p. 840 (1855).

1 ♀, mountain forests south of Linping, 6.ix.

Euproctis unifascia Wilem.

Euproctis unifascia Wilem., *Entom.* 43, p. 287 (1910).

1 ♂, 1 ♀, Canton, the ♀ taken on 5.x; 2 ♂♂, Lofaoshan, 6.iv and 27.vii.

In this species there may be considerable variation in the width and shape of the medial fascia.

Euproctis inornata Wilem.

Euproctis inornata Wilem., *Entom.* 43, p. 286 (1910).

2 ♂♂, Teeberg, 3 and 13.vii; 1 ♀, mountain forests south of Linping, 23.iv.

The female has a conspicuous fuscous spot on the discocellulars of the forewing, which is missing in the males.

Euproctis angulata Mats.

Euproctis angulata Mats., *Journ. Coll. Agric. Hokkaido*, xix, p. 40 (1927).

1 ♂, Lofaoshan, 9. iv ; 1 ♂, 2 ♀♀, Mantsishan, 18. iv, 12 and 14. xi.

I have seen no Formosan specimen of this species, but the present series seems to correspond to Matsumura's description and illustration, supplemented by that of its synonym *E. sakaguchii* Mats. (1927).

Medama diplaga Hmps. n.

Euproctis diplaga Hmps. n., *Journ. Bombay Nat. Hist. Soc.* xx, p. 113 (1910).

1 ♂, Canton West.

This specimen is in poor condition, but does not seem to be distinguishable from Formosan specimens.

Aroa ochripicta Moore.

Aroa ochripicta Moore, *Proc. Zool. Soc. Lond.*, p. 399 (1879).

2 ♂♂, 1 ♀, Canton, the ♂♂ dated 20. vi and 4. x ; 2 ♂♂, 1 ♀, Lofaoshan, 3 (2) and 19. iv ; 1 ♂, Teeberg, 16. v ; 2 ♀♀, Samkong, 14 and 21. v.

Numenes disparilis separata Leech.

Numenes disparilis separata Leech, *Entom.* xxiii, p. 112 (1890).

1 ♀, Canton West.

Numenes siletti Wlkr.

Numenes siletti Wlkr., *List Lep. Ins. B.M.* iii, p. 663 (1855).

1 ♀, Lungtaoshan, 3. vii.

Pseudodura dudgeoni Swinh.

Dasychira dudgeoni Swinh., *A.M.N.H.* (7) xix, p. 203 (1907).

4 ♂♂, Canton, two of which were taken on 27 and 29. i ; 1 ♂, mountain forests south of Linping, 12. vii ; 1 ♂, Lungtaoshan, 26. v.

Laelia anamesa Collnt.

Laelia anamesa Collnt., *A.M.N.H.* (10), xiii, p. 214 (1934).

1 ♂, 2 ♀♀, Canton ; 1 ♀, Lofaoshan, 27. vi ; 2 ♂♂, Lungtaoshan, 26. iv and 13. vii ; 4 ♂♂, Mantsishan, 15 and 18. iv, 17. vii and 3. x ; 1 ♀, Samkong, 12. viii.

The series resembles Siao-lou and Ta-t sien-lou (Szechwan) specimens. Both sexes vary greatly in size, and this species and others allied to it are difficult to determine. There are two spines of moderate size on the aedeagus.

Laelia suffusa Wlkr.

Ricine suffusa Wlkr., *List Lep. Ins. B.M.* iv, p. 824 (1855).

3 ♂♂, 2 ♀♀, Canton, 1 ♂ on 11. xi and 2 ♀♀ on 24. viii and 7. xi ; 1 ♀, Lofaoshan, 3. iv ; 2 ♀♀, Lungtaoshan, 19 and 21. vi ; 1 ♂, Gaufung, 24. vi.

Laelia philippinensis Collnt.

Laelia philippinensis Collnt., *A.M.N.H.* (10), xiii, p. 215 (1934).

1 ♂, 2 ♀♀, Canton, 6, 7 and 20. xi. 1920.

Laelia atestacea Hmps. n.

Harapa testacea Moore (nom. praecoc.), *Lep. Coll. Atk.* p. 47 (1879). *Laelia atestacea* Hmps. n., *Fauna Brit. Ind.* i, p. 443 (1893).

1 ♂, Canton West ; 3 ♂♂, 2 ♀♀, mountain forests south of Linping, on *Musa* sp., October 1920 ; 1 ♂, Samkong, 14. x.

Dasychira dalbergiae Moore.

Dasychira dalbergiae Moore, *Proc. Zool. Soc. Lond.* p. 399 (1888).

2 ♂♂, 2 ♀♀, Fungwan, 17. viii (2), 26. vii and 14. viii.

This species and *D. mendosa* Hübn. are often confused. I have not seen examples of the latter from China.

Dasychira grotei Moore.

Dasychira grotei Moore, *Cat. Lep. Mus. E.I.C.* ii, p. 338 (1859).

3 ♂♂, 3 ♀♀, Canton, of which 2 ♂♂ and 1 ♀ were taken on 27. x, 6. xii and 18. xi ; 3 ♂♂, 1 ♀, Lofaoshan, 11. viii, 15 and 19. x and 25. x ; 1 ♂, Lungtaoshan, 15. xi ; 1 ♀, Mantsishan, 11. ii ; 1 ♀, Samkong, 25. vi.

Dasychira cerebosa Swinh.

Lymantria cerebosa Swinh., *Trans. Ent. Soc. Lond.* p. 483 (1903).

1 ♂, Dingwushan, March ; 1 ♂, 7 ♀♀, Mantsishan, March and August.

Dasychira pennatula Fabr.

Bombyx pennatula Fabr., *Ent. Syst.* iii, i, p. 465 (1793).

2 ♂♂, Canton, one of which was taken on 31. v ; 1 ♂, Lofaoshan, 6. vi.

Dasychira nigrifula Wlkr.

Dasychira nigrifula Wlkr., *List Lep. Ins. B.M.* xxxii, p. 360 (1865).

5 ♂♂, 3 ♀♀, Canton, April-June and October ; 5 ♂♂, Lofaoshan, April and October ; 6 ♂♂, 3 ♀♀, mountain forests south of Linping, July-September ; 1 ♂, 1 ♀, Tsahyuenshan, 29. v ; 6 ♂♂, 1 ♀, Mantsishan, April, July-September and November ; 1 ♂, Samkong, 10. v.

Dasychira glaucozona sp. nov. (pl. X, fig. 15).

♂. Palpus, antennal shaft, head, thorax, abdomen and foreleg sepia mixed with tawny olive, pectinations of antenna tawny olive, some sepia dorsal tufts on basal segments of abdomen. Pectus and venter, middle and hindleg, tawny olive. Forewing Saccardo's umber mixed with tawny olive ; a fuscous-black streak along the upperside of 2nd anal vein from base to antemedial fascia ; dark antemedial and postmedial fasciae, running from costa to inner margin, not crenulated, the space between them dusted with pale drab grey, giving a bluish appearance ; reniform tawny olive bordered with fuscous black ; a fuscous-black subterminal fascia, with interneural streaks of the same colour running from the fascia to the termen between veins R^5 , M^1 and M^2 ; in the anal angle a patch of fuscous black edged distally with whitish ; fringe Saccardo's umber, lighter interneurally. Hindwing and fringe Saccardo's umber. *Underside* of both wings tawny olive ; in and beyond the cell of forewing a shade of Saccardo's

umber, and a spot of the same colour on discocellulars of hindwing; a rather prominent Saccardo's-umber postmedial fascia on both wings; fringes Saccardo's umber, lighter at the vein-ends.

♀. Resembles the ♂.

Expanse: ♂♂ 31-32 mm., ♀ 44 mm.

1 ♂ (holotype) Canton, 20.viii; 1 ♀ (allotype) Canton. Also, in the Höne collection, 1 ♂, West Tien-mu-shan, Prov. Chekiang, 1600 metres, 8.ix.

Somewhat resembles *D. flavimacula* Moore but smaller and with relatively broader wings, and with the fasciae on the forewing uncrenulated.

***Dasychira nachiensis* Marumo.**

Dasychira nachiensis Marumo, *Essays Navae*, p. 32 (1917).

1 ♀, Lungtaoshan, 9.vii.

I have seen no Japanese specimens of this species, but the present insect conforms to the description and figure. In the British Museum is a series from Assam which I have also included provisionally under this name. *D. nachiensis* must not be confused with *D. virescens* Moore, which has a narrow wavy pre-terminal fascia on the hindmargin in addition to the subterminal patches.

***Dasychira melli* sp. nov. (pl. X, figs. 10 and 22).**

♂. Palpus, antennal shaft, head and thorax pale drab grey mixed sparsely with snuff brown; palpus on outer side bistre; pectinations of antenna tawny. Abdomen tawny olive mixed with tilleul buff. Pectus, legs and venter tilleul buff, the tibiae and tarsi spotted with bistre. Forewing with ground colour pale drab grey, mixed in varying degree with Saccardo's umber; a heavy shading of Saccardo's umber in and above the cell, veins throughout the wing defined with the same colour and discocellulars faintly ringed; a zigzag fascia inwardly oblique from the apex to a point below vein *Cu*², broadening in its passage, thence outwardly oblique to the inner margin near the tornus; fringe pale drab grey marked interneurally with Saccardo's umber. Hindwing snuff brown, rather paler in basal and inner marginal areas; a darker patch on the discocellulars; fringe whitish. *Underside* of forewing snuff brown, fringe as on upperside. *Underside* of hindwing and fringe as on upperside, the patch on the discocellulars better defined.

♀. Resembles the ♂, but somewhat paler in coloration, and with a broad terminal shade (visible in nearly all specimens) on the hindwing.

Expanse: ♂♂ 37-44 mm., ♀♀ 51-52 mm.

1 ♂ (holotype) and 11 ♂♂ (paratypes) July, 1 ♀ (allotype) and 1 ♂ (paratype) September, 2 ♂♂ (paratypes) April, all from Lungtaoshan; 5 ♂♂, 1 ♀ (paratypes), mountain forests south of Linping, March-July; 1 ♂ (paratype) Mantsi-shan, July; 1 ♂, Canton, April.

This very distinct species is also represented in the Höne collection by a good series of both sexes from Chekiang.

***Dasychira orimba* Swinh.**

Olene orimba Swinh., *A.M.N.H.* (6), xiv, p. 435 (1894).

1 ♀, Lungtaoshan, 31.vii.

Dasychira angulata Hmps. n.

Dasychira angulata Hmps. n., *Trans. Ent. Soc. Lond.*, p. 292 (1895).

3 ♂♂, Dingwushan, 29.iii; 1 ♂, Lofaoshan, 30.xii; 1 ♀, mountain forests south of Linping, 6.iv; 1 ♂, Lungtaoshan, 4.ix.

Dasychira costalis Wlkr.

Melia costalis Wlkr., *List Lep. Ins. B.M.*, iv, p. 808 (1855).

3 ♂♂, 3 ♀♀, Canton, May and June 1909.

I have compared this series with that in the British Museum from Java, and find that they entirely agree. The species occurs also in Burma.

Dasychira bhana Moore.

Dasychira bhana Moore, *Proc. Zool. Soc. Lond.*, p. 804 (1865).

1 ♀, Lofaoshan, 6.viii.

This is the first Chinese specimen and the first female of the species that I have seen. The markings on the forewing are less distinct than in the male, and further material may show that it represents a separate subspecies.

Dasychira taiwana Wilem.

Dasychira taiwana Wilem., *Entom.*, 43, p. 311 (1910).

1 ♂, mountain forests south of Linping, 14.v.1921.

The present specimen appears to be the first example known from China. A very closely allied species, *D. hirayamae* Mats., occurs in Japan.

Pida strigipennis Moore.

Lochana strigipennis Moore, *Lep. Coll. Atk.*, p. 53 (1879).

1 ♀, Lungtaoshan, 19.vi; 1 ♀, mountain forests south of Linping, 3.viii.

Cifuna locuples Wlkr.

Cifuna locuples Wlkr., *List Lep. Ins. B.M.*, v, p. 1173 (1855).

2 ♀♀, Canton; 2 ♂♂, Lofaoshan, 30.viii and 8.ix; 1 ♀, mountain forests south of Linping, 30.ix; 1 ♀, Mantsishan, 10.viii; 1 ♂, Gaufung, 30.vi; 1 ♂, Tongchungshan, 12.viii; 1 ♂, Samkong, 14.ix.

Cifuna jankowskii glaucoptera subsp. nov. (pl. X, fig. 9).

Oryza jankowskii Oberth., *Et. d'Ent.*, x, p. 13 (1884).

The insects before me are easily separable from *C. j. jankowskii* (Sidemi, Manchuria), but I think it advisable to treat them only as belonging to a geographical race.

The antemedial fascia on the forewing of both sexes is well defined, and its distal edge is straight, not curved or irregular as in *C. j. jankowskii*. Moreover the ground colour of the forewing is normally olive green, although in poor specimens it may fade to a shade of brown.

Expanse: ♂♂ 35-43 mm., ♀ 49 mm.

1 ♂ (holotype), 1 ♀ (allotype) and 7 ♂♂ (paratypes), Lungtaoshan, March, May-July and October; 4 ♂♂ (paratypes), mountain forests south of Linping.

July, September–October; 3 ♀♀, Mantsishan, June and September; 1 ♂, 2 ♀♀, Samkong, May and October; 1 ♂, Canton, November. The species is also represented in the Hōne collection, from Chekiang.

***Orgyia* sp.** (pl. X, fig. 5).

A single ♀ taken at Mantsishan on 28.ii.1917, with an expanse of 51 mm., agrees fairly well structurally with *Orgyia thyellina* Butl. (1881) and may be a large and poorly marked example of that species. However, *O. thyellina* has not been found previously outside Japan, and further material will probably show that the present specimen represents an undescribed form.

***Orgyia postica postica* Wlkr.**

Lacida postica Wlkr., *List Lep. Ins. B.M.* iv, p. 803 (1855).

8 ♂♂, Canton, of which four were taken on 27.v, 29.vi, 28.x and 13.xi; 1 ♂, 2 ♀♀, Lofaoshan, 9.v (2) and ii.x.

***Pantana visum* Hübn.**

Pantana visum Hübn., *Zutrage Ex. Schmett.* iii, p. 33 (1825).

5 ♂♂, Canton; 1 ♂, Lungtaoshan, 7.vii.

Larvae on *Bambusa* sp.

Strand, in Seitz' *Grossschm. d. Erde.* ii, p. 125, suggests that *P. ampla* Wlkr. (1855) (Hongkong) cannot be separated from *P. visum* Hübn., the type of which was stated by Hübner to come from Monte Video, but which is now assumed to have originated in Burma. I have compared a series of ♂♂ from Hongkong with others from Burma and the East Indies, and can find no distinguishing points in marking or genitalia. Although Hongkong specimens have usually been known as *P. ampla*, I now use Hübner's older name of *P. visum*.

***Pantana sinica* Moore** (pl. X, fig. 12).

Pantana sinica Moore, *A.M.N.H.* (4), xx, p. 92 (1877).

2 ♀♀, Canton, of which one was taken on 28.iii; 1 ♂, 1 ♀, Lungtaoshan, 18.iv and 9.vii; 3 ♂♂, Tsahyuenshan, 25 and 28.iv and 26.vi; 1 ♂, Gaufung, 24.iv.

The ♀ does not appear to have been described previously. It resembles the ♀ of *Pantana terminata* Wlkr., but with the dark spots in the angles of veins M^2 to Cu^2 considerably enlarged and almost filling the angles between the veins. These spots, together with a faint shade between veins M^1 and M^2 of the forewing, are the only markings on the wings.

***Pantana limbifera* Strand.**

Pantana limbifera Strand, Seitz' *Grossschm. d. Erde.* ii, p. 125 (1911).

10 ♂♂, Fungwan, August–September; 1 ♂, Mantsishan, 16.ix; 9 ♂♂, Teeberg, August–September.

Strand described this insect on a single male from Chang-yang, as an aberration of *P. sinica* Moore, but after examination of the present series I have no hesitation in pronouncing it a distinct species.

One of the Teeberg insects has the whitish colour on both wings almost entirely suffused with snuff brown.

P. eurygania Druce (1899), known by a single male from Szechuan, Western China, and *P. droa* Swinh., known by a single male from Hongkong, closely resemble *P. limbifera*, but should be kept separate until further material can be examined from these localities.

Daplasa irrorata Moore.

Daplasa irrorata Moore, *Lep. Coll. Atk.* p. 52 (1879).

1 ♂, Canton; 1 ♀, Lofaoshan, 30.v; 1 ♂, 1 ♀, Lungtaoshan, 27.v and 9.vi; 1 ♂, Fungwan, 3.ix; 1 ♀, Mantishan, 26.v.

Lymantria mathura Moore.

Lymantria mathura Moore, *Proc. Zool. Soc. Lond.* p. 805 (1865).

Lymantria aurora Butl., *A.M.N.H.* (4) xx, p. 403 (1877).

1 ♂, Canton; 2 ♂♂, 5 ♀♀, Fungwan, 27.v-6.vi; 1 ♂, Teeberg, 20.vi; 8 ♀♀, Gaufung, 31.v-30.vi; 1 ♂, Samkong, 22.viii.

Lymantria xyliana Swinh.

Lymantria xyliana Swinh., *Trans. Ent. Soc. Lond.* p. 490 (1903).

1 ♀, Lungtaoshan, 7.vi; 2 ♀♀, Mantsishan, 13.vi-26.vii.

The type of *L. xyliana* (Formosa), which is a male, is unique. The present series of ♀♀ agrees well with this insect, and I have little hesitation in assigning them to the same species. The ♀♀ of *L. apicebrunnea* Gaede (Ta-t sien-lou) are larger, and less heavily marked.

Lymantria marginata Wlkr.

Lymantria marginata Wlkr., *List Lep. Ins. B.M.* iv, p. 877 (1855).

1 ♀, Lungtaoshan, 30.viii.

Lymantria obsoleta iris Strand.

Lymantria obsoleta iris Strand, *Seitz' Grossschm. d. Erde*, ii, p. 130 (1910).

5 ♂♂, 7 ♀♀, Canton, April and October.

Lymantria nebulosa Wilem.

Lymantria nebulosa Wilem., *Entom.* xliii, p. 309 (1910).

3 ♀♀, Canton; 3 ♂♂, 2 ♀♀, April and October, Lofaoshan; 1 ♀, Mantsishan, 9.vi; 3 ♂♂, Gaufung, 25.v.

In this series, the male corresponds well with Formosan specimens, but the females have darker irroration and heavier markings on the forewing.

Lymantria roseola Mats. (?) (pl. X, fig. 4).

Lymantria roseola Mats., 6,000 *Insects of Japan*, p. 715, fig. 494 (1931), and *Insecta Matsumurana*, vii, 3, p. 138 (1933).

2 ♂♂, Lofaoshan, 25.v and 19.x; 1 ♀, mountain forests south of Linping, 26.iv.

The original description of this species related to a Formosan male, while the illustration is apparently that of a female. I have seen no example from Formosa, but the present specimens conform well to the description.

Lymantria polioptera sp. nov. (pl. X, fig. 19).

♀. Palpus fuscous, mixed sparsely with pale pinkish buff. Antennal shaft fuscous black, pectinations fuscous. Head and thorax pale pinkish buff mixed with fuscous; a narrow collar of geranium pink at the base of the patagium. Abdomen Saccardo's umber mixed with geranium pink. Legs fuscous, the fore-leg banded on tibia and tarsus with whitish. Forewing whitish, irrorated over the whole wing with fuscous black; a spot of fuscous black at the upper angle of the cell, and a conspicuous line of the same colour along the lower half of the discocellulars; a conspicuous streak of fuscous black midway between the cell and the 2nd anal vein, running from below the junction of vein Cu^2 with the cell almost to the base of the wing; a rather faint subbasal and a crenate antemedial fascia; a crenate postmedial fascia, curved from costa to vein Cu^2 , thence inwardly oblique to inner margin; some dark subterminal interneural lunules; a series of terminal interneural fuscous black spots, produced on to the fringe, which is otherwise whitish. Hindwing Saccardo's umber, darker in the terminal area; fringe whitish marked interneurally with fuscous. *Underside* of both wings Saccardo's umber mixed with whitish; darker markings on the discocellulars, and a faint postmedial fascia on the hindwing; fringes as on upperside.

Expanse: ♀♀ 57–64 mm.

1 ♀ (holotype) and 1 ♀ (paratype), Lungtaoshan, 28.ix and 23.v.

A male taken in Canton on 6.xi, and a pair in the Hōne collection from Prov. Chekiang, appear to belong to this species. In the male the markings follow those of the female, the dark markings on the discocellulars and below the cell of the forewing are prominent, and the expanse is 34–36 mm.

This species resembles *L. luccscens* Btlr. of Japan, but is smaller, with distinct differences in markings. I have also compared it with *L. serva* Fab. of India and *L. serva iris* Strand of Hongkong. The female has a forewing grey in general appearance as against the brown colour of *L. serva iris*, while a comparison of the dark markings on discocellulars and below the cell will also serve to separate them.

Lymantria dispar asiatica Vnuk.

Lymantria dispar asiatica Vnuk., *Rev. Russe Ent.* xx, p. 79 (1926).

1 ♂, Canton, 1 ♂, Lungtaoshan, 31.v.

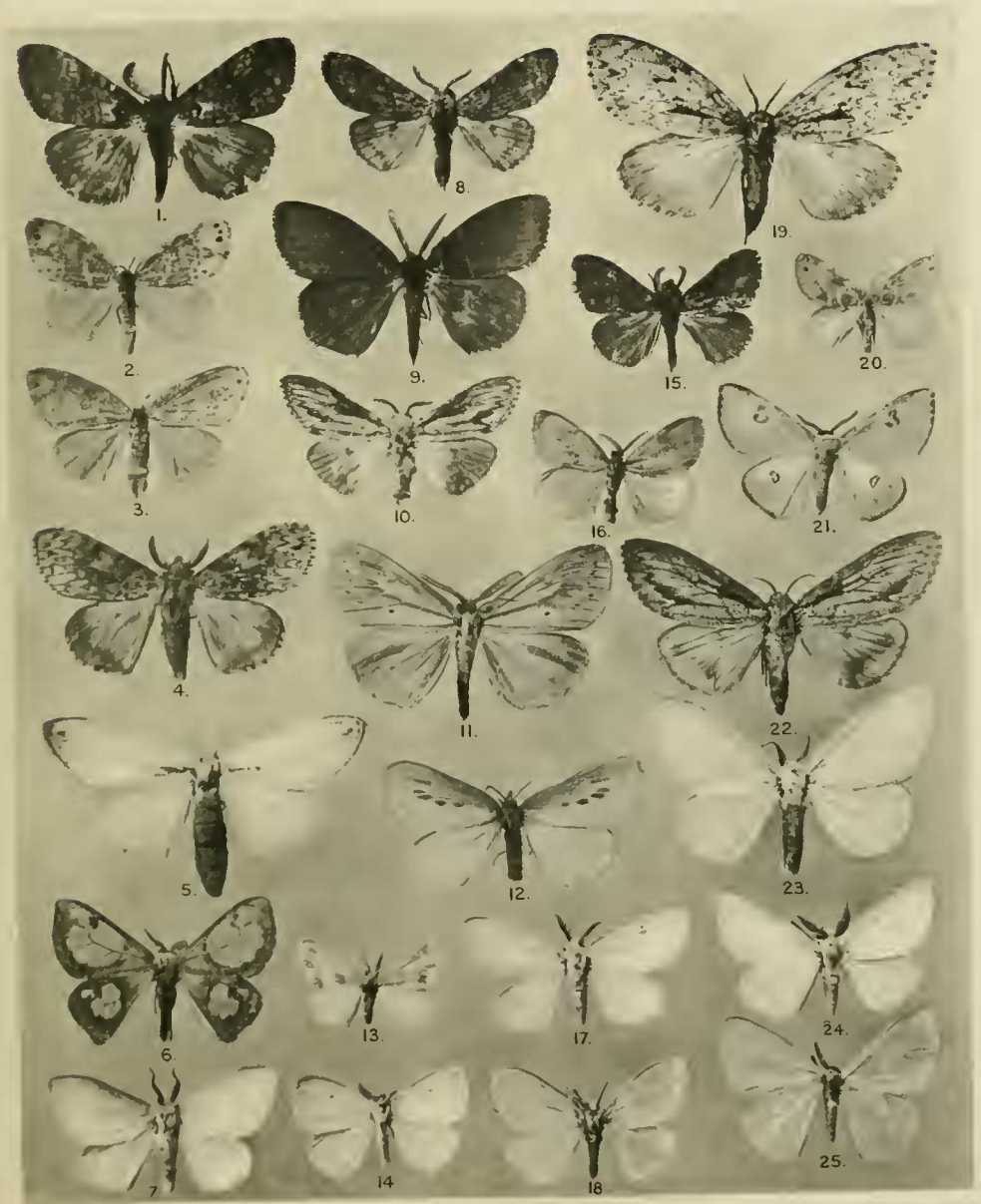
Lymantria dissoluta Swinh.

Lymantria dissoluta Swinh., *Trans. Ent. Soc. Lond.* p. 484 (1903).

2 ♂♂, 3 ♀♀, Canton; 4 ♂♂, 3 ♀♀, Lofaoshan, April, May and October; 1 ♀, Lungtaoshan, 3.vii; 1 ♀, Siuhang, 10.x; 7 ♀♀, Mantsishan, April, July and October; 1 ♀, Samkong, 17.x.

EXPLANATION OF PLATE X.

- Fig. 1. *Dasychira glaucinoptera* Collnt. ♂ holotype. (*Stylops*, p. 117, 1934)
- „ 2. *Euproctis pseudoconsersa* Strand. ♀ p. 141
- „ 3. „ „ „ ♀ p. 141
- „ 4. *Lymantria roseola* Mats. (?) ♂ p. 149
- „ 5. *Orgyia* sp. ♀ p. 148
- „ 6. *Leucoma seminsula* Strand. ♂ p. 138
- „ 7. *Caviria parallela* sp. nov. ♂ holotype p. 139
- „ 8. *Dasychira axutha* Collnt. ♂ holotype (*Stylops*, p. 117, 1934)
- „ 9. *Cifuna jankowskii glaucoptera* subsp. nov. ♂ holotype p. 147
- „ 10. *Dasychira melli* sp. nov. ♂ holotype p. 146
- „ 11. *Laelia monoscota* Collnt. ♂ holotype (*Stylops*, p. 116, 1934)
- „ 12. *Pantana sinica* Moore. ♀ p. 148
- „ 13. *Porthesia hoenei* Collnt. ♂ holotype p. 140
- „ 14. *Stilpnotia leucoscela* sp. nov. ♂ holotype p. 137
- „ 15. *Dasychira glaucozona* sp. nov. ♂ holotype p. 145
- „ 16. *Porthesia coniptera* Collnt. ♂ holotype (*Stylops*, p. 115, 1934)
- „ 17. *Caviria melanoscela* sp. nov. ♂ holotype p. 139
- „ 18. *Stilpnotia cygnopsis* Collnt. ♂ holotype (*Stylops*, p. 114, 1934)
- „ 19. *Lymantria polioptera* sp. nov. ♀ holotype p. 150
- „ 20. *Euproctis cryptosticta* sp. nov. ♂ holotype p. 141
- „ 21. *Leucoma diaphora* sp. nov. ♂ holotype p. 138
- „ 22. *Dasychira melli* sp. nov. ♀ allotype p. 146
- „ 23. *Caviria chrysoscela* Collnt. ♀ holotype (*Stylops*, p. 114, 1934)
- „ 24. „ *sericea horridula* Collnt. ♂ holotype (*Stylops*, p. 114, 1934)
- „ 25. „ *crocoptera* sp. nov. ♂ holotype p. 139



John Dale Sora A. [unreadable]

NEW AND LITTLE-KNOWN CHINESE LYMANTRIIDÆ.